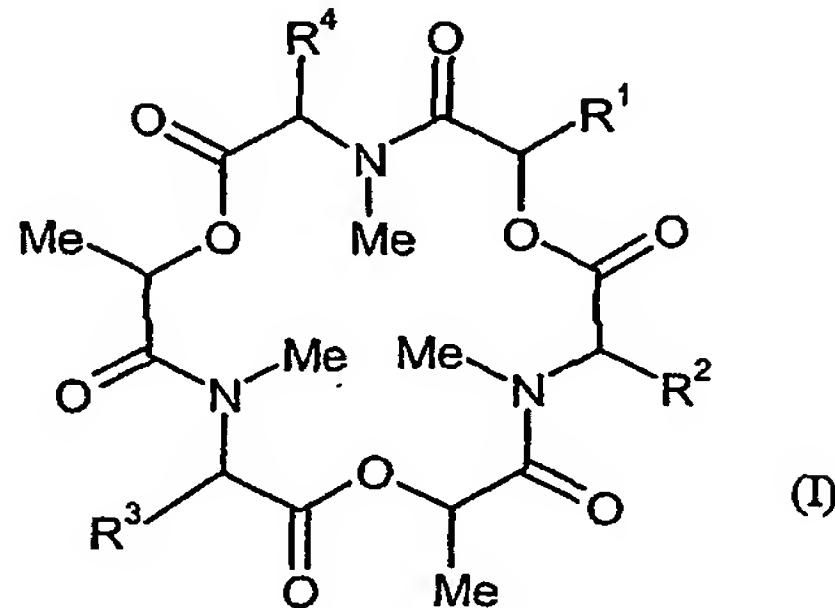


Patent claims

1. Cyclic depsipeptides of the general formula (I) and salts thereof



5 in which

R¹ represents nitrobenzyl or R'R''N-benzyl

where

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R' and R'' independently of one another each represent hydrogen, optionally substituted C₁-C₄-alkyl, formyl, C₁-C₄-alkoxy-C₁-C₄-alkyl, C₁-C₄-alkoxycarbonyl, hydroxy-C₁-C₂-alkylsulphonyl-C₁-C₂-alkyl

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or

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R' and R'' together with the nitrogen atom to which they are attached form an optionally substituted mono- or polycyclic saturated or unsaturated heterocycle which is optionally bridged and/or spirocyclic and which contains 1 to 3 further heteroatoms from the group consisting of nitrogen, oxygen and sulphur, or R' and R'' together form C₃-C₅-alkylenemonocarbonyl or an optionally substituted diacyl radical of a C₄-C₆-dicarboxylic acid, and

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R², R³ and R⁴ independently of one another represent C₁-C₄-alkyl,

and optical isomers and racemates thereof.

30

2. Depsipeptides of the general formula (I) and salts thereof according to Claim 1

in which

R¹ represent nitrobenzyl or R'R''N-benzyl

where

5

R' and R'' independently of one another each represent hydrogen, C₁-C₃-alkyl, in particular methyl, ethyl, C₁-C₃-alkoxy-C₁-C₃-alkyl, in particular methoxyethyl, 2-hydroxyethylsulphonyl-C₁-C₂-alkyl, in particular 2-hydroxyethylsulphonylethyl or

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R' and R'' together with the nitrogen atom to which they are attached represent N-pyrrolidino, N-piperidino, N-piperazino, N-morpholino, N-2,6-dimethylmorpholino, N-thiomorpholino, N-pyrazolo, N-imidazolo, 2-oxopyrrolidin-1-yl, 2-oxopiperidin-1-yl, 2-oxoazepan-1-ylmethyl, succinimino, maleinimino or glutarimino,

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R², R³ and R⁴ independently of one another represent C₁-C₄-alkyl,

and optical isomers and racemates thereof.

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3. Depsipeptides of the general formula (I) and salts thereof according to Claim 1

in which

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R¹ represents 4-nitrobenzyl, 4-aminobenzyl, 4-morpholinobenzyl, 4-hydroxyethylsulphonylethylaminobenzyl,

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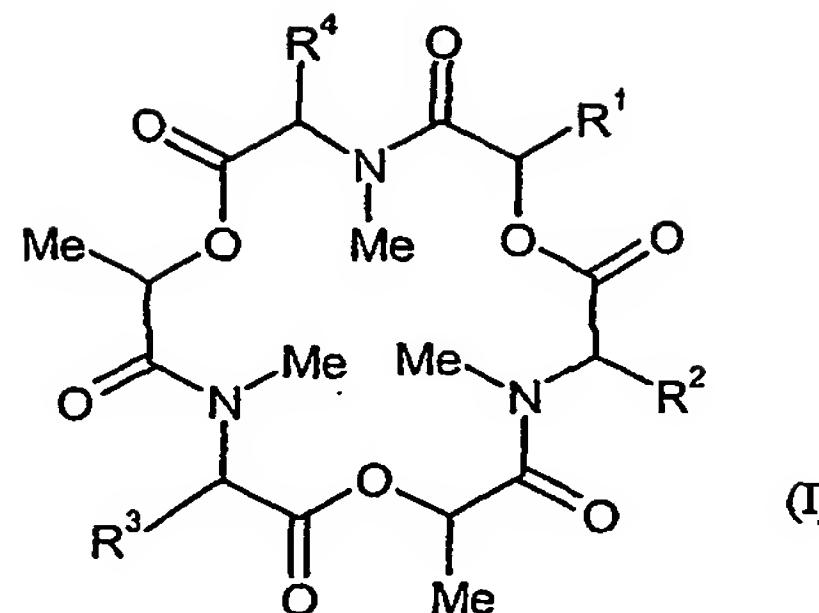
R² and R⁴ independently of one another represent C₁-C₄-alkyl, in particular methyl, isopropyl, isobutyl or sec-butyl,

R³ represents methyl or ethyl,

and optical isomers and racemates thereof.

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4. Process for preparing the cyclic depsipeptides of the general formula (I) and salts thereof



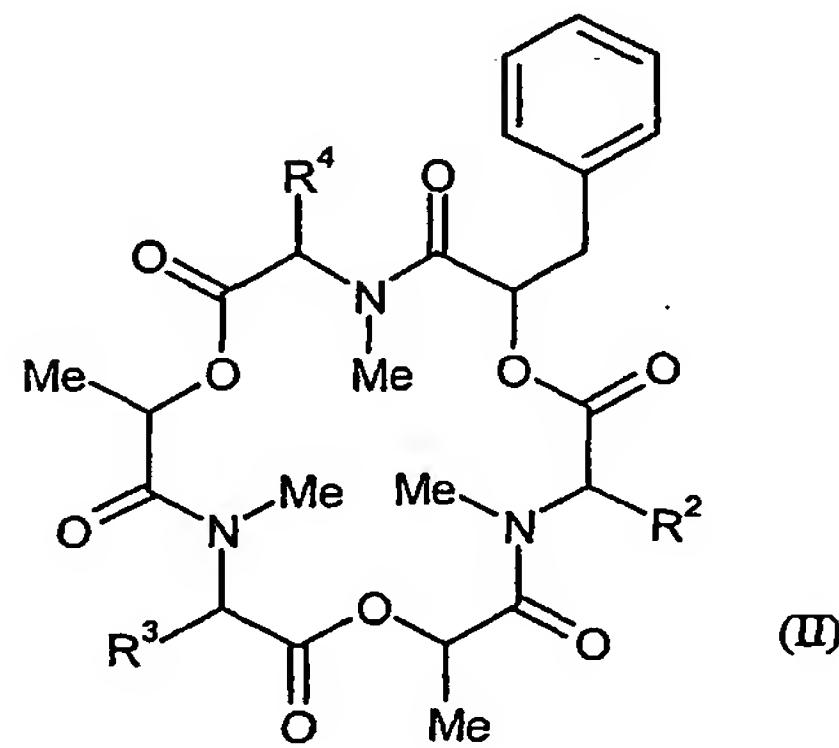
in which

R¹, R², R³ and R⁴ are as defined under item 1

5

which comprises

- a) in a first step, nitrating the cyclic depsipeptides of the general formula (II) and salts thereof



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in which

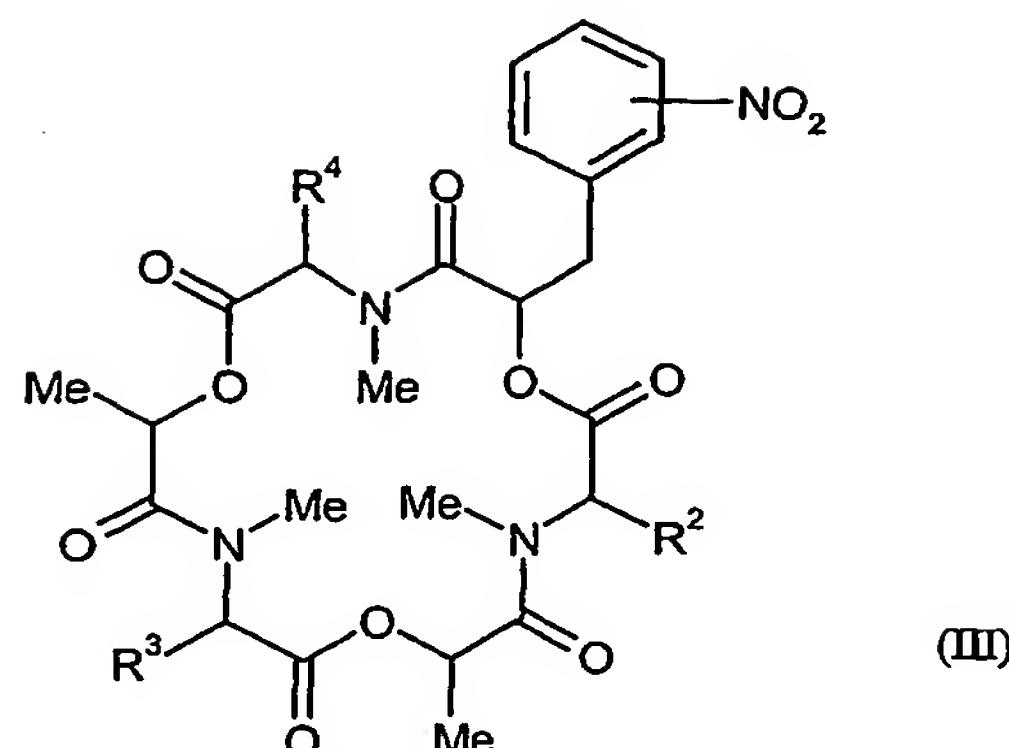
R², R³ and R⁴ are as defined under item 1

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in the presence of a nitrating agent and, if appropriate, in the presence of a diluent, and

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- b) if appropriate, in a second step, reducing the nitro group in the cyclic depsipeptides of the general formula (III) or salts thereof obtained in this manner



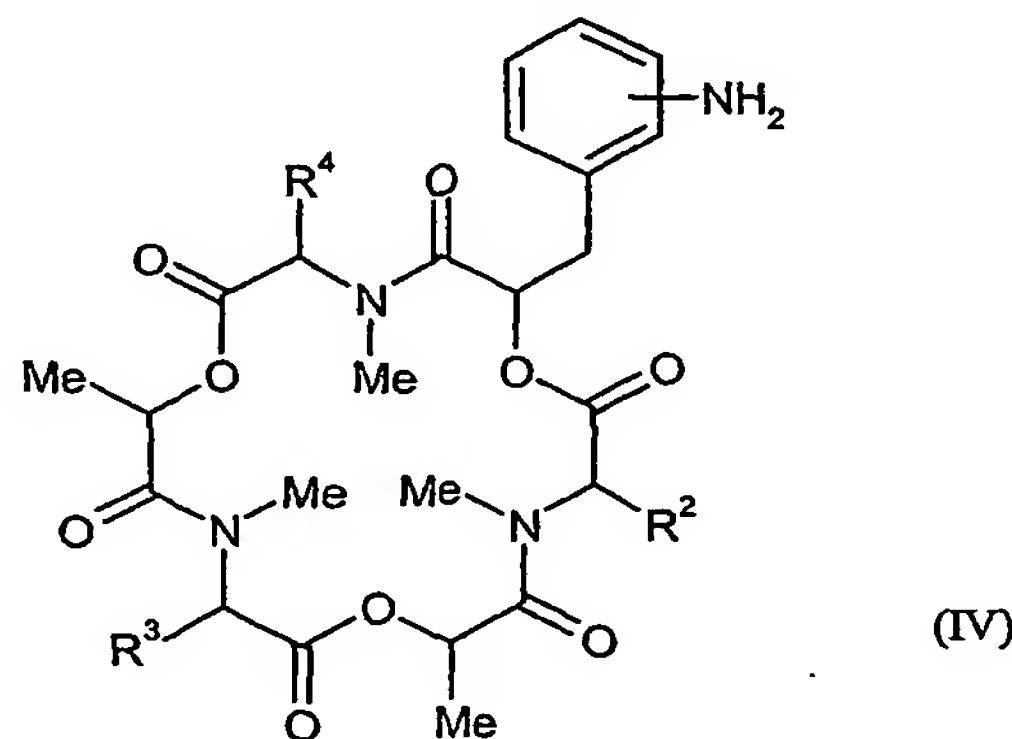
in which

R^2 , R^3 and R^4 are as defined under item 1

5

in the presence of a reducing agent and, if appropriate, in the presence of a diluent, and

10 c) if appropriate, in a third step, aminoalkylating the cyclic depsipeptides of the general formula (IV) and salts thereof



in which

R^2 , R^3 and R^4 are as defined under item 1

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to introduce the radicals R' and R'' , in the presence of a suitable aldehyde and a reducing agent and, if appropriate, in the presence of a diluent, or

20 N-alkylating these depsipeptides in the presence of a suitable alkylating agent and a basic reaction auxiliary and, if appropriate, in the presence of a diluent, or

N-acylating these depsipeptides in the presence of a suitable acylating agent and a basic reaction auxiliary and, if appropriate, in the presence of a diluent.

- 5 5. Compositions comprising a cyclic depsipeptide of the formula (I) according to Claim 1.
- 6. Use of cyclic depsipeptides of the formula (I) according to Claim 1 for controlling endoparasites.
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- 7. Use of cyclic depsipeptides of the formula (I) according to Claim 1 for preparing medicaments.
- 8. Method for controlling endoparasites which comprises allowing cyclic depsipeptides of the formula (I) according to Claim 1 to act on endoparasites and/or their habitat.
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